

13/6/74 (Item 22 from file: 55)  
0013685808 BIOSIS NO.: 200200279319

The effects of imidazole C-nucleoside derivatives on human histamine H3  
and H4 receptors expressed in SK-N-MC cells  
2002

13/6/75 (Item 23 from file: 55)  
0013673339 BIOSIS NO.: 200200266850

Identification and characterization of histamine H4 receptor  
2002

13/6/76 (Item 24 from file: 55)  
0013644094 BIOSIS NO.: 200200237605

Studies on functional roles of the histaminergic neuron system by using  
pharmacological agents, knockout mice and positron emission tomography  
2001

13/6/77 (Item 25 from file: 55)  
0013409157 BIOSIS NO.: 200200002668

Cloning and expression of isoforms of the human H4 histamine receptor  
2001

13/6/78 (Item 26 from file: 55)  
0013349825 BIOSIS NO.: 200100521664

Complex pharmacological effects of GT-2331  
2001

13/6/79 (Item 27 from file: 55)  
0013315879 BIOSIS NO.: 200100487718

Characterization of mice lacking the histamine H3 receptor  
2001

13/6/80 (Item 28 from file: 55)  
0013084897 BIOSIS NO.: 200100256736

Cloning of a novel histamine receptor  
2001

13/6/81 (Item 29 from file: 55)  
0012969786 BIOSIS NO.: 200100141625

Cloning pharmacological characterization of a fourth histamine receptor  
(H4) expressed in bone marrow  
2001

13/6/82 (Item 30 from file: 55)  
0012969785 BIOSIS NO.: 200100141624

Genomics meets histamine receptors : New subtypes, new receptors  
2001

? logoff hold

14oct04 08:05:19 User276677 Session D3.2

	\$0.20	0.051 DialUnits File431
\$0.20	Estimated cost File431	
	\$5.42	1.693 DialUnits File154
	\$0.00	52 Type(s) in Format 6
	\$0.00	52 Types
\$5.42	Estimated cost File154	
	\$5.95	1.063 DialUnits File55
	\$0.00	30 Type(s) in Format 6
	\$0.00	30 Types
\$5.95	Estimated cost File55	
	OneSearch, 3 files, 2.807 DialUnits FileOS	
\$1.74	TELNET	
\$13.31	Estimated cost this search	
\$13.34	Estimated total session cost 3.005 DialUnits	

Logoff: level 04.16.00 D 08:05:19

You are now logged offWelcome to DIALOG

Dialog level 04.16.00D

Reconnected in file OS 14oct04 08:09:20

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SYSTEM:OS - DIALOG OneSearch  
 File 431:MediConf: Medical Con. & Events 1998-2004/Sep B2  
 (c) 2004 Dr. R. Steck  
 File 154:MEDLINE(R) 1990-2004/Oct W2  
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 have changed. Please see HELP NEWS 154 for details.  
 File 55:Biosis Previews(R) 1993-2004/Oct W2  
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Set	Items	Description
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Cost is in DialUnits

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Set	Items	Description
S1	208	'HISTAMINE RECEPTOR'
S2	5982	"H4"
S3	3187	H()4
S4	0	HISTAMIN\$
S5	57774	HISTAMIN?
S6	1102804	RECEPTO?
S7	21121	S5 AND S6
S8	21121	S1 OR S7
S9	18377	S5 (S) S6
S10	18377	S1 OR S9
S11	9081	S2 OR S3
S12	113	S10 AND S11
S13	82	RD (unique items)

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13/3,K/74 (Item 22 from file: 55)  
DIALOG(R)File 55:Biosis Previews(R)  
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0013685808 BIOSIS NO.: 200200279319

**The effects of imidazole C-nucleoside derivatives on human histamine H3 and H4 receptors expressed in SK-N-MC cells**

AUTHOR: Hashimoto T (Reprint); Bakker R; Zuiderveld O; Smit M; Leurs R; Yamamoto Y (Reprint); Harusawa S; Araki L; Kurihara T; Sakamoto Y; Yamatodani A (Reprint)

AUTHOR ADDRESS: Sch. Allied Hlth Sci., Fac. Med., Osaka Univ., Osaka, Japan  
\*\*Japan

JOURNAL: Japanese Journal of Pharmacology 88 (Supplement 1): p211P 2002  
2002

MEDIUM: print

CONFERENCE/MEETING: 75th Annual Meeting of the Japanese Pharmacological Society Kumamoto, Japan March 13-15, 2002; 20020313

SPONSOR: Japanese Pharmacological Society

ISSN: 0021-5198

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Citation

LANGUAGE: English

**The effects of imidazole C-nucleoside derivatives on human histamine H3 and H4 receptors expressed in SK-N-MC cells**

DESCRIPTORS:

ORGANISMS: PARTS ETC: histamine H-3 receptors --...

... histamine H - 4 receptors --

13/3,K/75 (Item 23 from file: 55)

DIALOG(R)File 55:Biosis Previews(R)

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0013673339 BIOSIS NO.: 200200266850

**Identification and characterization of histamine H4 receptor**

AUTHOR: Matsumoto Shunichiro (Reprint)

AUTHOR ADDRESS: Institute for Drug Discovery Research, Yamanouchi Pharmaceutical Co., Ltd., 21 Miyukigaoka, Tsukuba, Ibaraki, 305-8585, Japan\*\*Japan

JOURNAL: Japanese Journal of Pharmacology 88 (Supplement 1): p41P 2002  
2002

MEDIUM: print

CONFERENCE/MEETING: 75th Annual Meeting of the Japanese Pharmacological Society Kumamoto, Japan March 13-15, 2002; 20020313

SPONSOR: Japanese Pharmacological Society

ISSN: 0021-5198

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Citation

LANGUAGE: English

**Identification and characterization of histamine H4 receptor**

DESCRIPTORS:

CHEMICALS & BIOCHEMICALS: ... histamine H4 receptor --

13/3,K/76 (Item 24 from file: 55)  
DIALOG(R)File 55:Biosis Previews(R)  
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0013644094 BIOSIS NO.: 200200237605

**Studies on functional roles of the histaminergic neuron system by using pharmacological agents, knockout mice and positron emission tomography**

AUTHOR: Watanabe Takehiko; Yanai Kazuhiko (Reprint)

AUTHOR ADDRESS: Department of Pharmacology, Tohoku University Graduate School of Medicine, 2-1 Seiryomachi, Aoba-ku, Sendai, 980-8575, Japan\*\*  
Japan

JOURNAL: Tohoku Journal of Experimental Medicine 195 (4): p197-217

December, 2001 2001

MEDIUM: print

ISSN: 0040-8727

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

DESCRIPTORS:

CHEMICALS & BIOCHEMICALS: ... histamine 1 receptor {H1 receptor };  
...  
... histamine 2 receptor {H2 receptor }; ...  
... histamine 3 receptor {H3 receptor }; ...  
...histamine 4 { H4 }; ...  
... histamine 4 receptor { H4 receptor };

13/3,K/77 (Item 25 from file: 55)

DIALOG(R)File 55:Biosis Previews(R)

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0013409157 BIOSIS NO.: 200200002668

**Cloning and expression of isoforms of the human H4 histamine receptor**

AUTHOR: Gallagher M J (Reprint); Yates S L (Reprint); Tedford C E (Reprint)

AUTHOR ADDRESS: Discovery Research, Giatech Inc., Cleveland, OH, USA\*\*USA

JOURNAL: Society for Neuroscience Abstracts 27 (2): p2122 2001 2001

MEDIUM: print

CONFERENCE/MEETING: 31st Annual Meeting of the Society for Neuroscience  
San Diego, California, USA November 10-15, 2001; 20011110

ISSN: 0190-5295

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

**Cloning and expression of isoforms of the human H4 histamine receptor**

ABSTRACT: The H4 histamine receptor is a G-protein-coupled receptor (GPCR) that has recently been discovered. Unlike the H3 receptor, which is expressed primarily in the CNS, the expression of H4 appears to be leukocyte specific. The H4 receptor is believed to respond to histamine levels affecting neutrophils and eosinophils in lymphoid

tissues. **H4 receptors** share only a 43% nucleotide homology with their closest known relative the **H3 receptor**. Several groups have recently reported the cloning of this **receptor** (Oda et al., J. Biol. Chem. 47:36781-36786, (2000); Zhu et al., Mol. Pharm...

...al., J. Pharm. Exp. Ther. 296:1058-1066 (2001). They have all reported the same **receptor** sequences and have found similar affinities of their expressed **receptors** for **histamine** (apprx17 nM). We have cloned two potential isoforms of the human **H4 receptor** which contain deletions in the N-terminus of the **receptor** protein. The isoform H4b contains a 54 residue deletion in the **receptor** between transmembrane domains 2 and 3, while the isoform H4c contains a 33 residue deletion...

...4. The effect that these deletions have on the activity and binding affinity of the **H4 receptor** is presently being investigated. These **H4 receptors** may be useful tools for the discovery of novel therapeutics in the treatment of allergy.

DESCRIPTORS:

CHEMICALS & BIOCHEMICALS: H-4b **histamine receptor** ----.

...H-4c **histamine receptor** --

METHODS & EQUIPMENT: H - 4 **histamine receptor** cloning...

13/3,K/78 (Item 26 from file: 55)

DIALOG(R) File 55:Biosis Previews(R)

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0013349825 BIOSIS NO.: 200100521664

Complex pharmacological effects of GT-2331

AUTHOR: Esbenshade T (Reprint); Krueger K (Reprint); Denny L I (Reprint); Miller T (Reprint); Kang C H (Reprint); Witte D (Reprint); Yao B (Reprint); Black L (Reprint); Bennani Y (Reprint); Fox G B (Reprint); Pan J B (Reprint); Decker M W (Reprint); Hancock A (Reprint)

AUTHOR ADDRESS: Neurological and Urological Diseases Research, Abbott Laboratories, Abbott Park, IL, USA\*\*USA

JOURNAL: Society for Neuroscience Abstracts 27 (1): p989 2001 2001

MEDIUM: print

CONFERENCE/MEETING: 31st Annual Meeting of the Society for Neuroscience San Diego, California, USA November 10-15, 2001; 20011110

ISSN: 0190-5295

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

...ABSTRACT: dimethylhex-1-ynyl)cyclopropyl)imidazole) is reported to be a potent antagonist at the rat **histamine** H3 **receptor** (H3R). Herein, we confirm its affinity for rat cortical H3R ( $K_i=0.26$  nM), but...

...affinities at human alpha2a ( $K_i=5.8$  nM) and alpha2c ( $K_i=10.8$  nM) adrenergic **receptors** and human **H4 histamine receptors** ( $K_i=80$  nM). In vitro, GT competitively antagonized, albeit weakly ( $pA_2=7.8$ ), H3R-agonist...

...contractions dose dependently at higher concentrations. GT only partially reversed H3R-agonist mediated inhibition of **histamine** release from rat cortical synaptosomes ( $K_b=7.5$  nM). Further, GT behaved as a partial...

...human H3R than the rat H3R while showing a high affinity for additional biogenic amine **receptors**. GT also possesses partial agonist activity that may contribute to the complex pharmacological profile seen...

DESCRIPTORS:

CHEMICALS & BIOCHEMICALS: ... **histamine H3 receptor**; ...

... **histamine H4 receptor**

13/3,K/79 (Item 27 from file: 55)

DIALOG(R)File 55:Biosis Previews(R)

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0013315879 BIOSIS NO.: 200100487718

**Characterization of mice lacking the histamine H3 receptor**

AUTHOR: Toyota H (Reprint); Dugovic C; Koehl M; Weber C; Ngo K (Reprint); Wu Y (Reprint); Lee D H (Reprint); Turek F W; Fung-Leung W P (Reprint); Lovenberg T W (Reprint)

AUTHOR ADDRESS: Neuroscience, R. W. Johnson Pharmaceutical Research Institute, San Diego, CA, USA\*\*USA

JOURNAL: Society for Neuroscience Abstracts 27 (1): p492 2001 2001

MEDIUM: print

CONFERENCE/MEETING: 31st Annual Meeting of the Society for Neuroscience San Diego, California, USA November 10-15, 2001; 20011110

ISSN: 0190-5295

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

**Characterization of mice lacking the histamine H3 receptor**

ABSTRACT: **Histamine**, is a multifunctional substance that has a neurotransmitter role in the central nervous system. **Histaminergic** neurons, which originate in the tuberomammillary nuclei, project throughout the CNS, and are implicated in...

...water intake, temperature regulation, memory, and other homeostatic mechanisms. Four subtypes (H1, H2, H3, and **H4**) of **histamine receptor** are currently recognized. H3 **receptors** are auto- and heteroreceptors controlling the release of **histamine** and other neurotransmitters. The recent cloning of the H3 **receptor** allowed us to create a mouse strain devoid of H3 **receptors**. The **receptor**-deficient mice develop normally, are fertile, and have no obvious motor abnormalities. H3-deficient mice

...

...for any of the known H3 radioligands and appear to have normal levels of H1 **receptors**. The H3-deficient mice exhibit a suppressed REM sleep pattern and are insensitive to the wake-promoting effects of the H3 **receptor** antagonist thioperamide. H3 **receptor**-deficient mice show a normal memory response in the passive avoidance test, but exhibit altered sensitivity to several CNS acting drugs. The H3 **receptor**-deficient mouse should be a valuable model for determining the role of this **receptor** in the CNS of mammals.

DESCRIPTORS:

...ORGANISMS: animal model, **histamine H-3 receptor** deficient

CHEMICALS & BIOCHEMICALS: ... **histamine H-1 receptor** --...

... histamine H-3 receptor --

13/3,K/80 (Item 28 from file: 55)

DIALOG(R)File 55:Biosis Previews(R)  
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0013084897 BIOSIS NO.: 200100256736

**Cloning of a novel histamine receptor**

AUTHOR: Jones Philip G (Reprint); Uveges Albert J (Reprint); Wu Shujian (Reprint); Betty Maria (Reprint); He Lan (Reprint); Pausch Mark H (Reprint)

AUTHOR ADDRESS: Wyeth Neurosciences, CN8000, Princeton, NJ, 08543, USA\*\*USA  
JOURNAL: FASEB Journal 15 (5): pA931 March 8, 2001 2001

MEDIUM: print

CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001 Orlando, Florida, USA March 31-April 04, 2001; 20010331

ISSN: 0892-6638

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

**Cloning of a novel histamine receptor**

ABSTRACT: The effects of **histamine** are mediated through 3 G protein-coupled **receptors** H1-3. Pharmacological evidence suggests that there may be subtypes of H3. Using bioinformatics we have identified the sequence of a novel G protein-coupled **receptor** encoded on chromosome 18. This clone is 390 amino acids long and BLAST analysis indicates that it's closest relative is the human **histamine H3 receptor** (43% similarity). The sequence contains the conserved GPCR motifs and of note are the conserved DY residues in transmembrane 3 indicative of muscarinic and **histaminergic receptors**. Taqman analysis indicates that it is highly expressed in peripheral blood leucocytes. To confirm its identity as a **histamine receptor** we have expressed the **H4** in both yeast and mammalian cells. The coupling of GPCRs to the yeast pheromone pathway provides a universal signaling system for ligand identification, coupling **receptor** activation to cell growth or reporter gene activity. Using this system we confirm that this **receptor** is a **histamine receptor** being stimulated by **histamine** and R-alpha-methyl **histamine**. The H3 antagonist thioperamide is also a **H4** antagonist and interestingly the H3 antagonist clobenpropit acts as a partial agonist. Expression of the **receptor** in mammalian cells confirms these results and indicates that the **H4** is coupled to the inhibition of adenylyl cyclase.

DESCRIPTORS:

CHEMICALS & BIOCHEMICALS: ... **histamine receptor**

13/3,K/81 (Item 29 from file: 55)

DIALOG(R)File 55:Biosis Previews(R)  
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0012969786 BIOSIS NO.: 200100141625

**Cloning pharmacological characterization of a fourth histamine receptor (H4) expressed in bone marrow**

AUTHOR: Liu Changlu; Ma Xiao-Jun; Jiang Xiaoxia; Wilson Sandy J; Hofstra

Claudia L; Blevitt Jonathan; Pyati Jayashree; Li Xiaobing; Chai Wenying;  
Carruthers Nicholas; Lovenberg Timothy W (Reprint)  
AUTHOR ADDRESS: R. W. Johnson Pharmaceutical Research Institute, 3210  
Merryfield Row, San Diego, CA, USA\*\*USA  
JOURNAL: Molecular Pharmacology 59 (3): p420-426 March, 2001 2001  
MEDIUM: print  
ISSN: 0026-895X  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

**Cloning pharmacological characterization of a fourth histamine receptor ( H4 ) expressed in bone marrow**

**ABSTRACT:** Histamine is a multifunctional hormone that regulates smooth muscle contraction in the airways, acid secretion in the gut, and neurotransmitter release in the central nervous system through three well characterized receptor subtypes, H1, H2, H3, respectively. As part of a directed effort to discover novel G-protein-coupled receptors through homology searching of genomic databases, we identified a partial clone (GPCR105) that had significant homology to the recently identified histamine H3 receptor cDNA. Expression of the full-length human GPCR105 in cells confers the ability to bind (3H) histamine with high affinity ( $K_D = 5$  nM). GPCR105 is pharmacologically similar to the histamine H3 receptor in that it binds many of the known H3 agonists and antagonists, albeit with a...

...potency. GPCR105 does not bind (i.e.,  $K_D > 10$   $\mu$ M) all tested H1 and H2 receptor antagonists such as diphenhydramine, loratadine, ranitidine, and cimetidine, but has modest affinity for the H2 receptor agonist, dimaprit (377 nM). Whereas the H3 receptor is expressed almost exclusively in nervous tissues, GPRC105 is expressed primarily in bone marrow and eosinophils. Together, these data demonstrate that GPCR105 is a novel histamine receptor structurally and pharmacologically related to the H3 receptor. However, its unique expression profile and physiological role suggest that GPCR105 is a fourth histamine receptor subtype ( H4 ) and may be a therapeutic target for the regulation of immune function, particularly with respect...

**DESCRIPTORS:**

CHEMICALS & BIOCHEMICALS: H-1 histamine receptor ; ...  
...H-2 histamine receptor ; ...  
... H - 4 histamine receptor --...  
... histamine H2- receptor antagonist-drug...  
... histamine H-3 receptor cDNA { histamine H-3 receptor complementary DNA  
? LOGOFF HOLD